

1.0 FRED-E INTRODUCTION

1.1 GENERAL INFORMATION

Information Systems (IS) in the Special Supplemental Nutrition Program for Women, Infants and Children (WIC Program) support a number of program operations and management functions, such as certifying applicants, monitoring food vendors, tracking participation and expenditures, and managing appointments. This Functional Requirements Document for a Model WIC Information System, With Electronic Benefits Transfer (FRED-E), not only provides a comprehensive description of functions that can be automated to support the WIC Program, but also incorporates basic functions for an Electronic Benefit Transfer/Electronic Service Delivery (EBT/ESD) system. The document is intended to help State agencies in the preparation of a Request for Proposals for automated services and to serve as guidance to in-house Information Technology staff in the development of a WIC IS, to include electronic benefit and/or service delivery.

FRED-E was developed by MAXIMUS under contract with the Food and Nutrition Service (FNS) of the U.S. Department of Agriculture. It contains information obtained from site visits to the California, New Jersey and New Mexico WIC Programs in the fall of 1999, as well as a review of the WIC Indian Networking Data System (WINDS) used by WIC Indian Tribal Organizations located primarily in the Mountain Plains region. These systems were selected as examples of some of the most current automated State agency systems¹. The site visits served to document State system design and enabled MAXIMUS to interview WIC Program and Information Technology staff regarding critical and desirable WIC IS functions as well as obtain suggestions and ideas for future WIC IS enhancements.

Descriptions of system functions can be found in Chapter 3.0. Readers with a limited knowledge of EBT/ESD should read Appendix C before reading Chapter 3.0, as this appendix provides a detailed analysis of EBT/ESD functions. This

¹ These and several other WIC information systems are described in Appendix E: Comparison of State Systems Matrix.

foundation will assist the reader to better understand EBT/ESD requirements and to have a context for reviewing the functional descriptions. Section 1.3, document layout, provides more information on the contents of this document.

1.2 REQUIRED FUNCTIONS AND PRIORITIZATION OF FUNCTIONS

Not all functionality described in this document necessarily needs to be incorporated into a WIC information system. Some functions, for example, may be automated outside the WIC information system, but use data extracted from the WIC IS database for analysis and processing.

1.2.1 Required Functions

In 1999 – 2000, the National WIC Association (NWA)/FNS Technology Strategic Planning Work Group conducted a series of meetings to identify program functions that every State agency should automate in order to support efficient program operations. The Work Group felt that, for the vast majority of State agencies, lack of automation in any of the areas identified through this process would significantly reduce the efficiency of WIC Program operations. These functions, which are referred to as required or core, are listed in Appendix B. The Work Group identified five additional functions, but these functions were thought to be difficult to achieve because of their potential cost. These functions, referred to as future core, are listed separately in Appendix B. Required functions are also identified in *italics* throughout Section 3 of this document.

Incorporating all 24 required functions might be difficult in some State agencies due to funding constraints or for other reasons. Since the required functions are part of FNS' 5-Year Technology Plan sent to Congress in 2000, FNS will review Advanced Planning Documents (APDs) to ensure the required functions are included when systems are being developed. If certain required functions cannot be achieved or are already automated in a separate system, State agencies should document the reason the function will not be automated in the APD. During Management Evaluations, IS will be reviewed to ensure the required functions are accomplished and FNS will track this activity.

1.2.2 Prioritization of Functions

This document includes many functions that State agencies and FNS alike would consider important for inclusion in an automated system. State agency discretion is needed in determining which functions to include in their system. For some State agencies, cost will be a primary factor in making this determination. FNS recommends that State agencies weigh the cost of a function against the long-term benefit that automation of the function will bring to their Program. To assist State agencies in prioritizing, the functions are broken into levels, with level one representing the least amount of automation. Levels are not always mutually exclusive; States can incorporate more than one level into their system design. FNS recommends that State agencies work toward achieving the highest level of automation, as funds permit. At a minimum, the required functions should be achieved, where possible.

1.3 DOCUMENT LAYOUT

FRED-E is divided into four main sections and nine appendices. The contents of these four sections are outlined below.

- **Introduction** – Provides background information and details the report organization.
- **Program Overview** – Describes the existing WIC business process and summarizes the functionality of the model WIC IS.
- **WIC Information System Functions** – Details the ten major functions of a WIC IS.
- **Data** – Describes the data requirements to support the functions.

Several appendices are available to provide greater detail about EBT/ESD, technology considerations, techniques for transferring a system and other topics that elaborate on the information provided in the main sections. The appendices provide practical approaches for the implementation and customization of individual State agency systems and are further described below. Due to the nature of the material provided, some appendices may become outdated, but the FNS will make every effort to keep this document up to date. Document revisions will be periodically posted to the FNS website (www.fns.usda.gov).

- **Appendix A: Requirements Traceability Matrix (RTM)** – The RTM provides a detailed overview of all of the possible functions and

activities related to each functional description. The RTM offers a “baseline” from which State agencies can customize their design to meet their system objectives. Further, the functions can be “mixed and matched” to better reflect the unique operation and preferences of the State agency.

- **Appendix B: NWA/FNS WIC Strategic Planning Work Group Functions** – This appendix provides a detailed description of the required (core) and future core functions developed through a joint NWA/FNS initiative.
- **Appendix C: Electronic Benefit Transfer/Electronic Services Delivery Systems** – This appendix summarizes in a single, convenient location the functional requirements for a WIC EBT/ESD system. It is structured to support State agencies in developing their RFPs for EBT/ESD and provides information on components of it’s the State’s current IS that might need modification for an EBT/ESD system. Readers unfamiliar with EBT/ESD should read this appendix prior to reading Section 3.
- **Appendix D: Technology Considerations** – Providing a primer on various technologies, this appendix is meant to help States to evaluate these technologies for their own environments. Suggested uses for each technology in the WIC program are included.
- **Appendix E: Comparison of State Systems** – State agencies considering system transfers can use this appendix to compare and contrast various options. This appendix reviews several alternative systems with differing architectures and features for State agencies to consider.
- **Appendix F: Sample Analysis Tools** – State agencies can use the documents in this appendix to determine whether to develop a new WIC information system or enhance an existing system. First, there is a discussion of the system cost issues. Second, there are sample questionnaires that can be used by States to streamline their development/enhancement projects. The first survey vehicle is focused on requirements gathering and can be used in design sessions or user interviews. The second questionnaire highlights key issues in selecting a system for transfer.
- **Appendix G: Hardware, Software, and Alternative Architecture Considerations** – Existing State environments impact the feasibility of different technical architectures for a WIC information system. This appendix helps State agencies sort through the issues that can ensure a “good fit” when considering different architectural strategies. It also describes hardware and software considerations.
- **Appendix H: Glossary of Acronyms and Terms** – This appendix orients the “newcomer” to WIC Program and emerging technology terms.
- **Appendix I: Report Descriptions** – While the functional descriptions provide some general ideas for reports, this section provides more

detailed description of potential reports. These examples are not exhaustive. Instead, they are intended to give the State agency examples of the data elements, frequency and uses of reports that could be included in the system. This appendix also discusses the various methods of reporting, i.e., standard, ad hoc, and data warehouses.

1.4 ENVIRONMENT

The WIC Program operates through the coordinated efforts of Federal, State and local organizations. The FNS Supplemental Food Programs Division (SFPD) is responsible for the administration of the WIC Program at the Federal level.

There are seven FNS regional offices, which provide oversight, guidance and technical assistance to individual State agencies within their region. At the State level, the WIC Program is administered by public health departments or Indian Tribal Organizations (ITOs). The WIC Program is operated in all geographic States as well as the District of Columbia, Puerto Rico, Virgin Islands, Guam, American Samoa, and 33 ITOs. While all State agencies have automated IS capabilities, the level of sophistication varies from State to State. Additionally, the State agencies may contract with private firms for system design and development as well as for processing, including banking transaction management.